

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (Currently Amended) A constant current driving unit for constant current driving a plurality of ~~series connected devices~~light emitting devices by a pulse width modulating constant current driving circuit, comprising:

~~said plurality of series connected devices;~~

a bypass circuit including (a) a plurality of thyristors, each of which is connected in parallel with a respective one of said series connected light emitting diodes, and (b) a gate potential setting circuit;

a switching device for pulse width modulation; and

a ~~resister~~resistor connected in parallel with said switching device for pulse width modulation,

wherein,

said gate potential setting circuit provides to said thyristors a gate potential value such that, when said ~~series connected~~light emitting devices are operating normally, said thyristors are in the off state,

said gate potential setting circuit provides to said thyristors another gate potential value such that, when said ~~series connected~~light emitting devices are in the open state, said thyristors are on, and

said ~~resister~~resistor is coupled to said pulse width modulating constant current driving circuit via a transistor such that current for maintaining the on state of a turned-on thyristor flows through said resistor when said transistor is off.

2-3. (Cancelled)

4. (Currently Amended) A backlight light source unit for illuminating a display panel from a back side thereof, comprising:

a plurality of light emitting diodes connected in series;

a plurality of thyristors, each of which is connected in parallel with a respective one of said series connected light emitting diodes;

a bypass circuit including said thyristors and a gate potential setting circuit;

a switching device for pulse width modulation; and

and a ~~resistor-resistor~~ connected in parallel with said switching device for pulse width modulation,

wherein,

said gate potential setting circuit ~~for~~ provides to said thyristors a gate potential value such that, when the series connected light emitting diodes are operating normally, said thyristors are off

said gate potential setting circuit provides to said thyristors another gate potential value such that, when said series connected light emitting diodes are in the open state, said thyristors are on and,

said ~~resistor-resistor~~ is coupled to said pulse width modulating constant current driving circuit via a transistor such that current for maintaining the on state of a turned on thyristor flows through said resistor when the transistor is off.

5. (Cancelled)

6. (Currently Amended) A color liquid crystal display apparatus comprising:

a light transmitting color liquid crystal display panel including a color filter and a backlight light source unit, for illuminating said light transmitting color liquid crystal display panel from the back side thereof;

a plurality of light emitting diodes connected in series ~~with one another~~;

a bypass circuit including (a) a plurality of thyristors, each of which is connected in parallel with a respective one of said series connected light emitting diodes, and (b) a gate potential setting circuit;

a switching device for pulse width modulation; and

a resistor connected in parallel with said switching device for pulse width modulation, wherein,

said gate potential setting circuit provides to said thyristors a gate potential value such that, when the series connected light emitting diodes are operating normally, said thyristors are off

said gate potential setting circuit provides to said thyristors another gate potential value such that, when said series connected light emitting diodes are in the open-circuited, said thyristors are turned on, and

said resistor is coupled to said pulse width modulating constant current driving circuit via a transistor such that current for maintaining the on state of a turned on thyristor flows through said resistor when the transistor is off.

7. (Cancelled)

8. (Previously Presented) A bypass circuit comprising:

a plurality of thyristors;

a plurality of voltage dividers each of which is coupled in parallel with a respective one of said thyristors;

voltage dividers comprising operatively coupled resistors; and

a plurality of series connected light emitting diodes,

wherein,

each voltage divider is connected to the gate terminal of its respective thyristor and supplies a gate potential value to the thyristor such that the thyristor is turned off during normal operation of said series-connected light emitting diodes and turned on when said series-connected light emitting diodes are open-circuited.

9. (Previously Presented) A gate potential setting circuit for a backlight light source comprising:

a plurality of thyristors;

a plurality of voltage dividers each of which is coupled in parallel with a respective one of said thyristors;

voltage dividers comprising operatively coupled resistors; and

a plurality of series connected light emitting diodes,

wherein,

each voltage divider is connected to the gate terminal of its respective thyristor and supplies a gate potential value to the thyristor such that the thyristor is turned off during normal operation of said series-connected light emitting diodes and turned on when said series-connected light emitting diodes are open-circuited.

10. (Previously Presented) A gate potential setting circuit for a backlight light source comprising:

a plurality of thyristors;

a plurality of voltage dividers each of which is coupled in parallel with a respective one of said thyristors;

voltage dividers comprising operatively coupled resistors; and

a plurality of series connected light emitting diodes,

wherein,

each voltage divider is connected to the gate terminal of its respective thyristor and supplies a gate potential value to the thyristor such that the thyristor is turned off during normal operation of said series-connected light emitting diodes and turned on when said series-connected light emitting diodes are open-circuited.